

**OCCUPATIONAL SAFETY
AND HEALTH STANDARDS BOARD**

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Attachment No. 2

INITIAL STATEMENT OF REASONS**CALIFORNIA CODE OF REGULATIONS**

TITLE 8: Chapter 4, Subchapter 4, Article 24, Section 1670(b)(10) and (17)
of the Construction Safety Orders

Use of Guardrails as Anchorage for Personal Fall Arrest Systems**SUMMARY**

Occupational Safety and Health Standards Board (board) staff notes that Title 8 section 1670(b)(17) of the Construction Safety Orders (CSO) prohibits the use of guardrails as anchor points for personal fall arrest systems (PFAs). However, board staff notes that federal OSHA in 29 CFR 1926.502, Subpart M, Fall Protection in the Construction Industry, Appendix C II, (h)(ii) states that federal OSHA recognizes that situations may exist where it is acceptable to use guardrails or railings for use as an anchor point provided they have been designed for such use. Federal OSHA also addresses the use of anchorages used for PFAs in 29 CFR 1926.502(d)(15)(i) and (ii), which is comparable to California's section 1670(b)(10). Both standards require anchorage for PFAs to be able to support at least 5000 pounds per employee attached. Both 29 CFR 1926.502(d)(23) and California's section 1670(b)(17) state that PFAs are not to be attached to guardrails except as specified in the respective standards, and, in the case of the federal standard, as specified in Appendix C to Subpart M. Moreover, federal OSHA has issued a Standards Interpretation and Compliance Letter dated June 8, 1998, in which it clarified that it recognizes that there may be a need for employers to devise anchor points from existing structures. As an example, they included guardrails or railings provided they have been designed for use as an anchor point.

Board staff concurs with federal OSHA as expressed in its Appendix C to Subpart M described above, to the extent that there are situations where suitable anchorage for PFAs is not readily available and there is a need for the employer to devise an anchor point from existing structures, such as a guardrail. Board staff also believes that if a guardrail has been designed (engineered) to meet the strength requirement stated in section 1670(b)(10) by a registered engineer, that such point of attachment meets the definition of "anchorage" in section 1504 of the CSO, and therefore is acceptable for use as a "...secure point of attachment..." for an employee's PFA. Consistent with the aforementioned federal OSHA documents, board staff proposes section 1670(b)(17) be amended to allow guardrails to be used as anchorage for PFAs provided (1) they are engineered for such use a California registered civil or structural engineer (P.E.) to meet the criteria as stated in section 1670(b)(10), and (2) other conditions are met which include, but are

not limited to, onsite maintenance of P.E. approved design documentation, identification of anchor points, and supervision of employees by qualified persons. Language clarifying the phrase "...safely support" and an exception is included which would prohibit the railings of scaffold systems to be used as anchorage.

SPECIFIC PURPOSE AND FACTUAL BASIS OF PROPOSED ACTION

Section 1670. Personal Fall Arrest Systems, Personal Fall Restraint Systems and Positioning Devices.

This section contains California's personal fall protection system requirements and addresses the use, care, and maintenance of PFAs, fall restraint and positioning device systems which include, but are not limited to the following: (1) trigger heights for the use of personal fall protection systems, (2) criteria for the design, use, and care of PFAs when used on scaffolds, in conjunction with lanyards, (3) lifelines, strength requirements for personal fall protection components, (4) methods of attaching lifelines to employees in elevator shafts, (5) use of self-retracting lifelines and lanyards, (6) use of body belts, (7) employee rescue in the event of an employee fall, and (8) anchorage criteria for PFAs.

Subsection (b) specifically addresses the use of PFAs and prohibits the use of body belts as part of a PFA system after January 1, 1998. Subsection (b)(17) states that PFAs shall not be attached to hoists, except as specified in the CSO, nor shall they be attached to guardrails. Revisions are proposed to add language in subsection (b)(17) that would clarify what is meant by the phrase "...safely support," and include four new paragraphs, A-D, that would permit employers to attach a PFA to a guardrail if (1) it has been designed (engineered) for such use by a registered engineer (P.E.) to safely support the intended load(s), as specified in the anchorage requirement contained in the preceding subsection (b)(10) of section 1670, (2) require engineering/design documentation be maintained onsite (e.g., design calculations, identification of anchor points, etc.), (3) require all anchor points be clearly identified and inspected by a qualified person before and after each use to ensure they are in a condition that will safely support the load, and (4) require that employees who use guardrail anchor points are supervised by a qualified person to ensure that they use the guardrail anchorage that have been inspected and used in accordance with their design specifications. An exception statement is proposed that will specifically exclude scaffold railings from the provisions of section 1670(b)(17).

The proposed revisions are necessary to provide the construction industry with the flexibility of alternative means of anchorage for their employees who wear PFAs. Employers would be able to solve on-the-job anchorage problems by either engineering their own guardrail anchorage which complies with the proposed amendment's anchorage requirements or purchase manufactured guardrail systems which have been engineered in accordance with the anchorage criteria specified in section 1670(b)(10). Currently, employers who cannot find suitable anchorage points as provided by the building's structural members would have to provide alternative means of addressing an employee's fall protection (e.g., additional guardrails, safety nets, fall protection plan). The proposal would permit the employer to use an engineered guardrail as anchorage, obviating the need for additional or alternative measures. The proposal is necessary to further ensure employee safety from fall injuries or death by providing another

option to secure PFAs by utilizing guardrails that are designed to safely support the load and not fail. The proposal is also necessary to ensure that employers understand that scaffold railings are not used for PFAs anchorage and what it means for a guardrail anchor point to be designed to safely withstand the load.

DOCUMENTS RELIED UPON

1. Letter to Jere W. Ingram, Chairman, Occupational Safety and Health Standards Board from John McCullough, C.S.P., Assistant Vice President, ABD Services dated March 5, 2001.
2. OSHA Regulations (Standards - 29 CFR), Personal Fall Arrest Systems - Non-Mandatory Guidelines for Complying with 1926.502(d) - 1926 Subpart M App C, specifically (h)(ii).
3. OSHA Standards Interpretation and Compliance Letters, 6/08/1998 - Fall protection anchorage points: guardrail systems and cranes.
4. OSHA Regulations (Standards - 29 CFR) Fall protection systems criteria and practices. - 1926.502.

These documents are available for review Monday through Friday from 8:00 a.m. to 4:30 p.m. at the standards board office located at 2520 Venture Oaks Way, Suite 350, Sacramento, California.

REASONABLE ALTERNATIVES THAT WOULD LESSEN ADVERSE ECONOMIC IMPACT ON SMALL BUSINESSES

No reasonable alternatives were identified by the board and no reasonable alternatives identified by the board or otherwise brought to its attention would lessen the impact on small businesses.

SPECIFIC TECHNOLOGY OR EQUIPMENT

This proposal will not mandate the use of specific technologies or equipment.

COST ESTIMATES OF PROPOSED ACTION

Costs or Savings to State Agencies

No costs or savings to state agencies will result as a consequence of the proposed action.

Impact on Housing Costs

The board has made an initial determination that this proposal will not significantly affect housing costs.

Impact on Businesses

The board has made an initial determination that this proposal will not result in a significant, statewide adverse economic impact directly affecting businesses, including the ability of California businesses to compete with businesses in other states.

Cost Impact on Private Persons or Businesses

The board is not aware of any cost impact that a representative private person or business would necessarily incur in reasonable compliance with the proposed action.

Costs or Savings in Federal Funding to the State

The proposal will not result in costs or savings in federal funding to the state.

Costs or Savings to Local Agencies or School Districts Required to be Reimbursed

No costs to local agencies or school districts are required to be reimbursed. See explanation under “Determination of Mandate.”

Other Nondiscretionary Costs or Savings Imposed on Local Agencies

This proposal does not impose nondiscretionary costs or savings on local agencies.

DETERMINATION OF MANDATE

The Occupational Safety and Health Standards Board has determined that the proposed standard does not impose a local mandate. Therefore, reimbursement by the state is not required pursuant to Part 7 (commencing with section 17500) of Division 4 of the Government Code because the proposed amendment will not require local agencies or school districts to incur additional costs in complying with the proposal. Furthermore, this standard does not constitute a “new program or higher level of service of an existing program within the meaning of section 6 of Article XIII B of the California Constitution.”

The California Supreme Court has established that a “program” within the meaning of section 6 of Article XIII B of the California Constitution is one which carries out the governmental function of providing services to the public, or which, to implement a state policy, imposes unique requirements on local governments and does not apply generally to all residents and entities in the state. (County of Los Angeles v. State of California (1987) 43 Cal.3d 46.)

The proposed standard does not require local agencies to carry out the governmental function of providing services to the public. Rather, the standard requires local agencies to take certain steps to ensure the safety and health of their own employees only. Moreover, the proposed standard does not in any way require local agencies to administer the California Occupational Safety and Health program. (See City of Anaheim v. State of California (1987) 189 Cal.App.3d 1478.)

The proposed standard does not impose unique requirements on local governments. All state, local and private employers will be required to comply with the prescribed standard.

EFFECT ON SMALL BUSINESSES

The board has determined that the proposed amendment may affect small businesses. However, no economic impact is anticipated.

ASSESSMENT

The adoption of the proposed amendment to this standard will neither create nor eliminate jobs in the State of California nor result in the elimination of existing businesses or create or expand businesses in the State of California.

ALTERNATIVES THAT WOULD AFFECT PRIVATE PERSONS

No reasonable alternatives have been identified by the board or have otherwise been identified and brought to its attention that would be more effective in carrying out the purpose for which the action is proposed or would be as effective and less burdensome to affected private persons than the proposed action.